CLAIMS

1. A process comprising:

applying a polymer film to a transparent substrate;

conditioning the polymer film; and

imprinting a plurality of microgrooves in the polymer film by pressing a tool against the polymer film, the tool having a pattern including a plurality of microgrooves formed in a surface thereof.

- 2. The process of claim 1 wherein the polymer film comprises a polyimide (PI) or a polyvinylalcohol (PVOH).
- 3. The process of claim 1 wherein the transparent substrate comprises glass.
- 4. The process of claim 1 wherein applying the polymer film to the transparent substrate comprises spraying or spin-coating the polymer film onto the transparent substrate.
- 5. The process of claim 1 wherein the plurality of microgrooves in the pattern have a selected profile.
- 6. The process of claim 5 wherein the selected profile is a square profile, a triangular profile, a spaced triangular profile, or a combination thereof.
- 7. The process of claim 1 wherein conditioning the polymer film comprises raising the temperature of the polymer film.
- 8. The process of claim 1 wherein conditioning the polymer film comprises at least partially curing the polymer film.
- 9. The process of claim 1 wherein conditioning the polymer film comprises doing nothing.

- 10. The process of claim 1, further comprising oscillating the tool in the plane of the polymer film.
- 11. The process of claim 10 wherein the microgrooves have an abrasive material embedded therein.
- 12. A process comprising:

providing a transparent substrate having a polymer film applied on one side thereof;

providing a tool having a contact surface, the contact surface having a plurality of microgrooves formed thereon;

pressing the contact surface against the polymer film.

- 13. The process of claim 12 wherein the polymer film comprises a polyimide (PI) or a polyvinylalcohol (PVOH).
- 14. The process of claim 12 wherein the transparent substrate comprises glass.
- 15. The process of claim 12 wherein the plurality of microgrooves have a selected profile.
- 16. The process of claim 15 wherein the selected profile is a square profile, a triangular profile, a spaced triangular profile, or a combination thereof.
- 17. The process of claim 15, further comprising conditioning the polymer film.
- 18. The process of claim 17 wherein conditioning the polymer film comprises raising the temperature of the polymer film.
- 19. The process of claim 17 wherein conditioning the polymer film comprises at least partially curing the polymer film.

- 20. The process of claim 17 wherein conditioning the polymer film comprises doing nothing.
- 21. A process comprising:

providing a transparent substrate having a polymer film applied on one side thereof;

providing a tool having a contact surface, the contact surface having a plurality of microgrooves formed thereon;

pressing the contact surface against the polymer film; and oscillating the contact surface in a plane of the polymer film.

- 22. The process of claim 21 wherein the polymer film comprises a polyimide (PI) or a polyvinylalcohol (PVOH).
- 23. The process of claim 21 wherein the transparent substrate comprises glass.
- 24. The process of claim 21 wherein the plurality of microgrooves have a selected profile.
- 25. The process of claim 24 wherein the selected profile is a square profile, a triangular profile, a spaced triangular profile, or a combination thereof.
- 26. The process of claim 21, further comprising conditioning the polymer film.
- 27. The process of claim 21 wherein conditioning the polymer film comprises raising the temperature of the polymer film.
- 28. The process of claim 21 wherein conditioning the polymer film comprises at least partially curing the polymer film.
- 29. The process of claim 21 wherein conditioning the polymer film comprises doing nothing.